

**IN THE SPECIFICATION:**

*On page 1, delete the heading begging at line 3 and insert the following headings and paragraph:*

**--Cross Reference to Related Applications**

This application is for entry into the U.S. national phase under §371 for International Application No. PCT/EP2003/011043 having an international filing date of October 7, 2003, and from which priority is claimed under all applicable sections of Title 35 of the United States Code including, but not limited to, Sections 120, 363 and 365(c).

**Technical Field--**

*On page 1, prior to line 19, please insert the following heading:*

**--Background of the Invention--**

*On page 3, please amend the paragraph beginning at line 4 as follows:*

--The reactor according to DE 40 12 300 A1 which, is likewise implemented as a loop-type bubble column reactor, comprises an insert in the form of a flow guide tube having a nozzle at the lower end thereof although the construction of the nozzle is not described in the publication. Gas is supplied to this nozzle through a first line and waste water is supplied thereto through a second line. In accordance with the drawings of this publication, the nozzle part serving for the supply of gas is longer than the nozzle part intended for the waste water.--

*On page 3, please amend the paragraph beginning at line 14 as follows:*

--The reactor according to DE 37 03 824 A1, which is also implemented as a loop-type bubble column reactor, has an insert in the form of a guide tube (with a deflector) into which a nozzle deeply projects. It has a central boring, a first annular gap for the supply of gas concentrically surrounding the boring and a second annular gap of the same axial length

which concentrically surrounds the first annular gap. The waste water requiring cleaning is supplied through the central boring and the annular gap. The central boring is axially longer than the first annular gap serving for the supply of gas.--

*On page 4, prior to line 10, please insert the following heading:*

--Summary of the Invention--

*On page 4, please amend the paragraph beginning at line 14 as follows:*

--In accordance with the invention, this object is achieved,

- in that the inner gas-conveying tube of the two-component nozzle, to which the gas is supplied by means of a blower, ends within the outer waste-water-conveying tube at a spacing from the outlet opening thereof which is greater by at least [[the]] a factor of "5" than the internal diameter of the outer tube in the vicinity of the outlet opening, and
- in that the outlet opening of the outer tube and thus the two-component nozzle is spaced from the base of the reaction vessel, which contains no further fittings other than the two-component nozzle, by a distance which is greater than half the height of the waste water in the reaction vessel.--

*On page 4, please amend the paragraph beginning at line 30 as follows:*

--In this method, the waste water being moved in a circulatory manner and the gas are supplied to at least one two-component nozzle spatially separated from one another, whereby the gas is already pre-dispersed in the two-component nozzle because of the tube that is shorter in comparison with the outer tube. Upon [[the]] emergence of the mixture of waste water and gas from the two-component nozzle into the contents of the reaction vessel, an impulse is transmitted by the mixture emerging from the two-component nozzle to the waste water in the reaction vessel by virtue of which the gas is additionally very finely dispersed

and transported downwardly in the reaction vessel. Due to the downwardly directed flow of the mixture of gas and waste water thereby ensuing and the deflection thereof at the base of the reaction vessel, there is a resultant circulating current therein so that the gas is distributed very uniformly in the reaction vessel. A guide tube or a separate dispersion device, such as the frequently used ring distributor or a diaphragm distributor for example, are not needed in this method. Thus, as the reaction vessel manages without any separate fittings, it can be of very simple design. The investment costs are therefore low. Because of the lack of fittings, the energy requirements can also be reduced by this method.--

*On page 5, prior to line 14, please insert the following heading:*

--Brief Description of the Drawings--

*On page 5, prior to line 28, please insert the following heading:*

--Detailed Description--